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REMARKS

Claims 1-36 are pending in this application. Claims 10, 16, 18 and 19 are allowed. The Examiner has rejected claims 1-9, 11-15, 17 and 20-36. The Applicants have reviewed the Examiner's rejections, and now respectfully traverse the Examiner's rejection. Reconsideration and allowance of the pending claims are requested for the reasons detailed below.

Novelty

1. Claim 1

The Examiner rejected claims 1-3, 5-9, 11-14, 17, 20-23, 25-27, and 30-33 as being anticipated by Schafft. The Applicants respectfully traverse the Examiner's rejection.

First, the Examiner notes the Applicants' argument that Schafft does not disclose the nonuniform layer as being electroactive. The Examiner then rejects that argument stating, "Schafft clearly discloses the non-uniform layer (center vane) as being electroactive. See col.5 line 1-9." However, the Applicants respectfully assert that a careful reading of Schafft shows that the center vane is merely a conductor and is not electroactive.

By examining Fig. 6 of Schafft, the Applicants draw the Examiner's attention to the two electroactive, dish shaped, circular, ceramic wafers 74 and 76. These wafers consist of uniform thickness electroactive materials. See col. 5, lines 1-7. The wafers are mechanically separated and electrically connected by the corrugated, conductive center vane 78. See col. 5, lines 4-7. The Applicants respectfully assert that the center vane is not electroactive. According to the Applicants' specification, the electroactive layer can be any material that responds to electrical activation, including a polymer, ceramic or composite. See page 6, lines 20-21. A preferred material is the electrostrictive graft elastomer described and claimed in "Electrostrictive Graft Elastomer," Serial No. 09/696,528, filed October 23, 2000 (now U.S. patent number 6,515,077). See page 6, lines 22-24. The center vane in Schafft is introduced to provide varying stiffness to the

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bimorph (or unimorph) bender. See col. 2, lines 55-70. This function would be fundamentally destroyed if the center vane itself were subject to electrical activation.

Further review of Schafft illustrates that in no instance does the thickness of the electoractive layers vary. Fig. 1 shows the uniform thickness electroactive layers 11 and 14 surrounding the conducting center vane 12. See col. 3, line 43. Fig. 3 shows uniform thickness electroactive layers surrounding a non-electroactive center vane that varies in width. See col. 4, lines 49-67. Fig. 4 shows a proposed speaker mount of the Schafft bimorph. Again, in this illustration it is clear that what is varying in thickness is the center vane 78, not the electroactive layers 74 and 76.

The Applicants respectfully submit that the cited art of Schafft does not anticipate nor teach the subject matter of claim 1.

2. Rejection of the Dependent Claims 2-3, 5-9, 11-14, 17, 20-23, 25-27, and 30-33

The Examiner further rejected dependent claims 2-3, 5-9, 11-14, 17, 20-23, 25-27, and 30-33 as being anticipated by Schafft.

Because these claims are dependent on claim 1 and because claim 1 is allowable as asserted above, the Applicants respectfully assert that these dependent claims are also allowable. Accordingly, the Applicants respectfully request reconsideration of the rejections to dependent claims 2-3, 5-9, 11-14, 17, 20-23, 25-27, and 30-33 and that these rejections be withdrawn.

Obviousness

The Examiner rejected claims 4, 15, 24, 28, 29, 34-35 under 35 U.S.C. 103(a) as being unpatentable over Schafft in view of Pelrine.

In response thereto, the Applicants note that M.P.E.P. §2143.03 provides that "if an independent claim is non-obvious under 35 U.S.C. §103, then any claim depending therefrom is non-obvious." In re Fine, 837 F.2d 1071, 5USPQ2d 1596 (Fed. Cir. 1988). Because these claims are dependent on claim 1 and because claim 1 is allowable as asserted above, the Applicants respectfully assert that these dependent claims are also allowable. Accordingly, the Applicants respectfully request reconsideration of the rejections to dependent claims 4, 15; 24, 28, 29, 34-35.

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Conclusion

In view of the above Remarks, the Applicants submit that all pending claims in the instant application are in condition for allowance. Reconsideration and withdrawal of the objections and rejections is requested and allowance of the claims at an early date is solicited.

Respectfully submitted,

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